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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,495	12/12/2005	Claus-Markus Pfeffer	05146204	4548
34431 7590 02/25/2008 HANLEY, FLIGHT & ZIMMERMAN, LLC 150 S. WACKER DRIVE SUITE 2100 CHICAGO, IL 60606				
EXAMINER				
CABRERA, ZOILA E				
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2123				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/560,495

**Applicant(s)**

PFEFFER, CLAUD-MARKUS

**Examiner**

Zoila E. Cabrera

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date 12/12/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7-14, 17-19, 21, 23-33 are rejected under 35 U.S.C. 102(e) as being anticipated by **Kurihara et al. (US 6,697,695)**.

As for claims 7-14, 17-19, 21, 23-33, **Kurihara** discloses:

7. (Currently Amended) A method for outputting fault messages from a number of spatially distributed production units forming at least one group of production units (Fig. 22) comprising generating a method fault signal by at least one of said production units (Col. 3, line 1), supplying the method fault signal to a data receiving unit (Fig. 22, monitor 312), forwarding said method fault signal to a fault alarm box (Fig. 22, server 314), supplying a fault message from said fault alarm box to one or more data receiving units for receiving and indicating fault messages (Fig. 22, display), and supplying the fault message from said fault alarm box to a process computer (Col. 4, lines 43-47).

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8. The method claimed in claim 7, wherein the fault signals of the production units are indicated by the data receiving unit (Fig. 22, display).

9. The method fault message system as claimed in claim 7, wherein characterized in that the fault signals of the production units are edited in the fault alarm box for conversion into fault messages (Col. 20, lines 41 to Col. 21, line 18).

10. The method as claimed in claim 9, wherein characterized in that a fault signal is only converted into a fault message in the fault alarm box when it is present for a predetermined period of time (Col. 16, line 49 to Col. 17, line 12).

11. The method as claimed in claim 9, wherein a fault signal is only converted into a fault message in the fault alarm box when a particular period of time has elapsed since the last presence of the previous fault signal (Col. 16, line 49 to Col. 17, line 12).

12. The method as claimed in claims 7, wherein the fault message is supplied to the process computer at a different time than the fault message is supplied to said data receiving units (Col. 19, lines 61-64; Col. 20, lines 28-33).

13. (New) A fault message system comprising:

a plurality of production units, wherein each production unit is associated with a transmitting unit for transmitting fault signals relating to said production unit (fig. 22,

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element 310); at least one group comprised of a number of said production units (Fig. 22, elements 311); wherein each group is associated with a data receiving unit for receiving fault signals transmitted by the transmitting unit associated with any production unit in said group (Fig. 22, element 316); a fault alarm connected to said data receiving unit (fig. 22, element 314; Fig. 14, elements 223,224); and a process computer connected to said fault alarm (Fig. 22, either server 314 or monitor 312).

14. (New) The apparatus of claim 13, further comprising a receiving device for receiving a fault message from said fault alarm (Fig. 15, 17, 22).

17. (New) The apparatus of claim 13, comprising a plurality of groups (Fig. 22).

18. (New) The apparatus of claim 13, wherein each group is comprised of production units of an individual production line (Fig. 22).

19. (New) The apparatus of claim 13, wherein said data receiving unit has a means for indicating fault signals (Fig. 15, warning display).

21. (New) The apparatus of claim 13, wherein said production units are spatially separated (Fig. 22).

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23. (New) The apparatus of claim 13, wherein said process computer is adapted to document and evaluate fault messages from said fault alarm (Fig. 14).

24. (New) The apparatus of claim 13, wherein said process computer is connected to said fault alarm via a network connection (Fig. 20).

25. (New) The apparatus of claim 13, wherein said fault alarm has a data editing means for determining when to send a fault message from said fault alarm (Col. 20, line 41 to Col. 21, line 18).

26. (New) The apparatus of claim 13, wherein said fault alarm is adapted to send said fault message only when a fault signal received by said data receiving unit is present for a first predetermined period of time (Col. 16, line 49 to Col. 17, line 12).

27. (New) The apparatus of claim 26, wherein said fault alarm is adapted to send a second fault message only when a second predetermined period of time has passed following the end of the fault signal present for the first predetermined period of time (Col. 16, line 49 to Col. 17, line 12).

28. (New) A method for outputting fault messages comprising:  
generating a first fault signal at a production unit of a group of production units (Fig. 22; Col. 3, line 1); sending said first fault signal to a data receiving unit associated with said

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group (Fig. 22, monitor 312); sending said first fault signal from said data receiving unit to a fault alarm (Fig. 22, server 314); determining whether to send a fault message from said fault alarm (Fig. 14, element 223); and sending a first fault message generated by said fault alarm to at least one data receiving unit or process computer (Fig. 22, display).

29. (New) The method of claim 28 further comprising visually displaying the first fault signal at said data receiving unit (Fig. 15, warning display).

30. (New) The method of claim 28 further comprising sending said first fault message only when said first fault signal is present in the fault alarm for a predetermined period of time(Col. 16, line 49 to Col. 17, line 12).

31. (New) The method of claim 28 further comprising generating a rising signal while said first fault signal is present in said fault alarm, and sending said first fault message only when said rising signal exceeds a predetermined threshold value(Col. 16, line 49 to Col. 17, line 12).

32. (New) The method of claim 28 further comprising sending a second fault message from said fault alarm in response to a second fault signal received after sending said first fault message, wherein said second fault message is sent only if a predetermined

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period of time has elapsed following the end of said first fault signal(Col. 16, line 49 to Col. 17, line 12).

33. (New) The method of claim 28, wherein said first fault message is sent to a data receiving unit and a process computer at different time intervals (Col. 4, lines 43-47).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 15-16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kurihara et al. (US 6,697,695)** in view of **Chen et al. (US 2005/0164684 A1)**.

**Kurihara** discloses,

1. (Currently Amended) A fault message system comprising a plurality of production units (Fig. 13 and 17, element 60), a fault alarm box (Fig. 14), a process computer (Fig. 14, element 90; Col. 12, lines 43-45), and one or more data receiving units for receiving and indicating fault messages (Fig. 15 and 17; Displays 40 to 40N), wherein said production units are arranged spatially distributed (Col. 8, lines 61-67), wherein said production units have means for generating and indicating a fault signal (Fig. 17; Col. 3,



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line 1), wherein said fault alarm box is constructed for receiving and forwarding fault messages (Col. 20, lines 20-27), wherein two or more of said production units are arranged to form at least one group (Fig. 22), wherein each group is associated with a data receiving unit (Fig. 22, Display), wherein said data receiving units are connected to the fault alarm box, and wherein the fault alarm box is connected to the process computer (Fig. 15; warning display is connected with fault alarm box or warning function in server and the fault alarm box is connected with a process computer in order to process the data).

2. (Currently Amended) The fault message system as claimed in claim 1, wherein the data receiving unit has means for indicating the fault messages (Fig. 15, warning display).

3. (Currently Amended) The fault message system as claimed in claim 1, wherein the fault alarm box is connected to the process computer via a network connection (Fig. 14).

4. (Currently Amended) The fault message system as claimed in claim 3, wherein the network connection is a LAN connection (Fig. 14).

5. (Currently Amended) The fault message system as claimed in claim 3, wherein the process computer is connected to other computers via a second network (Fig. 22).

6. (Currently Amended) The fault message system as claimed in claim 1, wherein the fault alarm box has a data editing unit(Col. 20, line 41 to Col. 21, line 18).

**Kurihara** discloses most of the limitations of claims 1, 13-14 above but fails to disclose some limitations of claims 1, 15-16, and 22. However, Chen discloses such limitations as follows:

As for claims 1, 15-16 and 22, Chen discloses,  
wherein each production unit is associated with a transmitting unit for the wireless transmission of fault signals (Abstract; [0078];[0086];[0023];[0073]);

15. (New) The apparatus of claim 14, wherein the receiving device is a mobile telephone ([0104]).

16. (New) The apparatus of claim 14, wherein said fault message is sent in the form of an SMS [0104].

22. (New) The apparatus of claim 13, wherein said fault signals are transmitted via wireless transmission ([0078];[0086]).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Kurihara** with **Chen** because it would provide an improved system by providing wireless enhanced support within a process control environment (Chen, [0002]).

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over

**Kurihara et al. (US 6,697,695)** in view of **Kitagawa et al. (US 5,224,047)**.

**Kurihara** discloses the limitations of claims 13 and 19 above but fails to specifically disclose said means for indicating fault signals is a lamp. However, **Kitagawa** discloses the use of a lamp for indicating faults signals (Col. 1, lines 39-41). Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Kurihara** with **Kitagawa** because it would provide an improved system by using a lamp for easily identifying abnormalities (Kitagawa, Col. 1, lines 35-41).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zoila E. Cabrera whose telephone number is 571-272-3738. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Zoila E. Cabrera/

Primary Examiner, Art Unit 2123

2/27/2008